AIRWORTHINESS DIRECTIVE

For the reasons set out in the background section, the CASA delegate whose signature appears below issues the following Airworthiness Directive (AD) under subregulation 39.001(1) of CASR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

Avions de Transport Regional ATR 42 Series Aeroplanes

AD/ATR 42/24 Flaps - 45 Degree Configuration 9/2008 DM

Applicability: ATR - GIE Avions de Transport Régional ATR 42-200, 42-300 and 42-320 aircraft.

Requirement:

1. For all Aircraft - Revise the Limitations and Performance Sections of the EASA-approved ATR42-200/300/320 Aircraft Flight Manual (AFM) to include the ATR 42 AFM Temporary Revision (TR) No.51 and delete pages concerning Mod 01314.

   By means of this TR No. 51, the 45° flaps configuration can only be used for emergency operations by decision of the captain provided that icing conditions have not been encountered during the flight and the aircraft is clear of ice.

Note 1: When changes introduced by TR No.51 have been incorporated into the Normal EASA-approved revisions of the AFM, the Normal revisions may be inserted into the AFM, provided that the information contained in the Normal revisions is identical to that specified in TR No.51

Note 2: The new Appendix 20 "Landing with Flaps 45°" provided by AFM TR No.51 does NOT constitute any airworthiness approval to conduct Normal Operations with Flaps at 45º but is only ATR guidance and recommended information to be used in case any individual operational exemption is granted by a National Aviation Authority (NAA) for using of the 45º Flaps setting on specific airfields where no icing conditions may be encountered and the aircraft is clear of ice.

2. For all ATR 42-200, 42-300 and 42-320 aircraft Pre Mod. 01192 or which have NOT embodied SB ATR42-27-0008 at any revision, in service - Unless previously accomplished, restrict the maximum permissible flaps extension in normal operations to 30° and install new speed limits placards as instructed in the accomplishment instructions of SB ATR42-27-0008 Revision 6 or later EASA approved revision and after embodiment, send the accomplishment report back to ATR.

Avions de Transport Regional ATR 42 Series Aeroplanes

AD/ATR 42/24 (continued)

3. For ATR 42 with manufacturing serial numbers (MSN) 027,102, 106 and 214, and modified per SB ATR42-27-0080 - Unless accomplished previously, undo changes introduced by SB ATR42-27-0080 and restrict the maximum permissible flaps extension in normal operations to 30° and install new speed limits placards as instructed in the accomplishment instructions of SB ATR42-27-0099 original issue or later EASA approved revision and after embodiment, send the accomplishment report back to ATR.

4. For ATR 42 MSN 097, if not previously modified per SB ATR42-27-0008 at any revision - Modify the aircraft per the instructions of SB ATR42-27-0099 original issue or later EASA approved revision.

5. For ATR 42 MSN 403 - Modify the aircraft per the instructions of SB ATR42-27-0099 original issue or later EASA approved revision.

6. For all other ATR 42 not addressed by Requirements 2, 3, 4 & 5 of this AD - Check that the red colour mechanical stop is installed on flaps control and that the following statement is written on the speed limits placard concerning the VFE limitations:

   "EMER: (45°). 130 kt".

   If any discrepancy is found, contact ATR to obtain the procedure in order to restore the aircraft to the approved configuration and implement the procedure accordingly.

7. Do not install ATR Mod. 01314 or implement SB ATR42-27-0080 on any aeroplane.

Note 3: EASA AD 2008-0124 dated 4 July 2008 refers. The EASA AD supersedes Direction Générale de l'Aviation Civile (DGAC) France AD F-1986-130-003.

Note 4: DGAC AD F-1986-130-003 is listed in Table 1 of AD/ATR 42/1, "State of Design Airworthiness Directives". AD/ATR 42/1 requires the operator to determine the applicability of each of the ADs listed in Table 1. As AD F-1986-130-003 has been superseded by EASA AD 2008-0124, F-1986-130-003 should be considered as no longer being applicable.

Compliance: For Requirement 1 - Within 7 days after the effective date of this AD.

For Requirements 2, 3, 4, 5 and 6 - Within 6 months after the effective date of this AD.

For Requirement 7 - After the effective date of this AD.

This Airworthiness Directive becomes effective on 16 July 2008.

Avions de Transport Regional ATR 42 Series Aeroplanes

AD/ATR 42/24 (continued)

Background: DGAC AD F-1986-130-003 was issued following an incident during a training flight when a temporary loss of the aircraft pitch control occurred due to a suspected tailplane stall that would have been caused by the conjunction of ice accretion on tail surface, flaps extension at 45° and airplane by the approach speed.

Revision 1 of AD F-1986-130-003, in April 1997, prohibited the use of flaps at the 45° configuration, except for emergency situations, and mandated the installation of a mechanical stop along with new markings through ATR modification (Mod) 01192 (ATR Service Bulletin (SB) ATR 42-27-0008). However the DGAC AD let the possibility for some operators to request an operational exemption, based on the aircraft operating network, granted by their National Aviation Authority. For these specific cases, the mechanical stop could be removed and the markings modified, in accordance with Mod 01314 (SB ATR42-27-0080).

These days, with second-hand aircraft movements worldwide, it is likely that some aircraft which were previously granted with an operational exemption can be currently operated without the flaps 45° limitation in geographic locations where the use of the 45° configuration may represent an unsafe condition.

This AD mandates AFM TR No.51 of the AFM with modification of the aircraft so as to restrict the maximum flaps extension to 30°. These actions are intended to prevent an uncontrollable nose pitch-down at low altitude resulting from a tail plane stall caused by ice accretions on tail surfaces in conjunction with full flaps down at 45° and the aircraft at approach speeds.

James Coyne
Delegate of the Civil Aviation Safety Authority

10 July 2008